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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|------------------------------------|-------------|----------------------|-------------------------|-----------------|
| 09/986,591 | 11/09/2001 | Теггу L. Dellinger | 01-031 | 5803 |
| 7590 10/29/2003 | | | EXAMINER | |
| Eugene Byrd | | | TRAN, HENRY N | |
| P.O. Box 2607 Fairfax, VA 22031 | | | ART UNIT | PAPER NUMBER |
| , | | • | 2674 | |
| | | | DATE MAILED: 10/29/2003 | 14 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|---|--|--|--|--|--|--|
| Office Action Summary | | 09/986,591 | DELLINGER, TERRY L. | | | |
| | | Examiner | Art Unit | | | |
| | | HENRY N. TRAN | 2674 | | | |
| 7 | The MAILING DATE of this communication app | 1 | | | | |
| Period for Reply | | | | | | |
| THE MA - Extension after SIX - If the peri - If NO per - Failure to - Any reply | TENED STATUTORY PERIOD FOR REPL' ILING DATE OF THIS COMMUNICATION. Ins of time may be available under the provisions of 37 CFR 1.1: (6) MONTHS from the mailing date of this communication. Indicated the maximum statutory period of reply is specified above, the maximum statutory period of reply within the set or extended period for reply will, by statute received by the Office later than three months after the mailing atent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may within the statutory minimum of the statutory minimum of the statutory minimum of the statutory minimum of the statutory of t | a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. & 133) | | | |
| 1)⊠ R | Responsive to communication(s) filed on <u>08 A</u> | August 2003 . | | | | |
| 2a) <u></u> ⊤ | his action is FINAL . 2b)⊠ Th | is action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-11</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-11</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>08 August 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | nowledgment is made of a claim for domestic | <u>-</u> | | | | |
| _ a) 🗀 | The translation of the foreign language pro nowledgment is made of a claim for domesti | visional application has | been received. | | | |
| Attachment(s) | | - | | | | |
| 2) Notice of 3) Information | References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-948) on Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice o | w Summary (PTO-413) Paper No(s) If Informal Patent Application (PTO-152) | | | |
| I.S. Patent and Traderr PTOL-326 (Rev. (| | tion Summary | Part of Paper No. 14 | | | |

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DETAILED ACTION

This Office action is in response to applicant's Amendment and Declaration filed 08/08/03 (Paper Nos. 12 and 13). The Amendment to the claims has been entered; claims 1-11 are pending in this application. The Declaration under 37 CFR 1.131 has overcome the rejections to the claims as set forth in the prior Office action (Paper No. 6); and said rejections have been therefore withdrawn. However, claims 1-11 are rejected in view of the newly discovered references to Jarlance-Huang (U.S. Patent 5,668,574), Paley (U.S. Patent 5,506,605), Akiyama (U.S. Patent 5,982,356), and George (U.S. Patent 5,267,181). Rejections based on the newly cited references follow.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarlance-Huang (U.S. Patent 5,668,574) in view of Paley (U.S. Patent 5,506,605).

Regarding claim 1, Jarlance-Huang teaches a wireless hand-held trackball pointing device for use by a user's hand, comprising: a housing 1 adapted and configured to fit into a user's hand proximate the metacarpal region of the user's fingers; switches 4a and 4b disposed in said housing for producing control signals; a circuitry connected to the trackball and the switches for generating an output signal representing trackball signal and switch signal; transmitter 51 as

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means for communicating the output signals to an external device, e.g., a computer, figures 1 and 2; and col. 1, line 62 to col. 2, line 60. However, Jarlance-Huang does not teach that housing of the trackball pointing device comprises a symmetrical housing adapted for use in either the right or left hand of a user. Paley teaches a hand-held pointing device 10 (a hand-held mouse 10), which comprises a housing 12 that is a symmetrical housing adapted for use in either the right or left hand of a user, figures 1-3, and col. 2, lines 40-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the symmetrical housing as taught by Paley in the Jarlance-Huang device because this would provide an ergonomic, hand contoured, comfortable to use, hand-held pointing device for use in either the right or left hand of a user, Paley, col. 1, line 63 to col. 2, line 2. By this rationale, claim 1 is rejected.

Regarding to claims 4-9, Jarlance-Huang also teaches the use of a wireless transmitter 51, which is a radio frequency (RF) transmitter, col. 2, lines 42-55. Paley also teaches: the use of a suitable means including a hard-wire cable 26 for transmitting infrared signals or radio signals, col. 2, lines 23-37, a switch 20 disposed at the pistol grip region of the housing 12; the grip region is used as a means for securing the pointing device to the user's hand, figure 1. Claims 4-9 are dependent upon claim 1, and are therefore rejected on the same reasons set forth for claim 1, and by the reasons noted above.

3. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jarlance-Huang (U.S. Patent 5,668,574) in view of Paley (U.S. Patent 5,506,605) (hereinafter referred to Jarlance-Huang – Paley) as applied to claim 1 above, and further in view of Akiyama (U.S. Patent 5,982,356).

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Jarlance-Huang - Paley teaches generally all, including push button switches 20 and 22 for interaction with user's fingers, except for the switch comprising three switches adapted and configured for switchable interaction with the metacarpal region of three adjacent fingers of a user's hand. Akiyama teaches a hand-held input apparatus 26 comprising a plurality of control buttons 44 adapted and configured for interaction with the adjacent fingers of a user's hand, figure 1, col. 5, lines 21-36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modifying the buttons as taught by Akiyama for arranging three button switches in the region of the switch 22 for switchable interaction with the metacarpal region of three adjacent fingers of a user's hand because it would provide an improved hand-held pointing device which is comfortable to use, and which is capable of eliminating discomfort and carpel tunnel syndrome disorders, Akiyama, col. 5, lines 36-41. Claims 2 and 3 are dependent upon claim 1, and are therefore rejected on the same reasons set forth for claim 1, and by the reasons noted above.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over 4. Jarlance-Huang - Paley as applied to claim 9 above, and further in view of George (U.S. Patent 5,267,181).

Jarlance-Huang - Paley teaches generally all except for the securing means comprising at least one elastic band, or at least one strap comprising hook and loop fastening means. George teaches an hand-held input device 1 comprising a band, or a strap 3 comprising pads 50 and 51 for hook and loop fastening the strap 3 onto the user's hand. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the band or strap as taught cation/Control Number: 09/986,591

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by George in the Jarlance-Huang – Paley device because this would provide an improved computer input device which is comfort and effective to use. Claims 10 and 11 are dependent upon claim 9, and are therefore rejected on the same reasons set forth for claim 9, and by the reasons discussed above.

Response to Arguments

5. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,805,256 discloses a hand-held input apparatus having a plurality of finger switches 26-32, figures 1 and 5.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY N. TRAN whose telephone number is (703) 308-8410. The examiner can normally be reached on Mon Fri from 8:00AM 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD A. HJERPE, can be reached at (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office Whose telephone number is (703) 306-0377.

Henry N. Jon

HENRY N. TRAN Examiner Art Unit 2674

hnt

October 21, 2003